RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/527,100A

Source: _____ IFWO

Date Processed by STIC: _____ 06/07/2006

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 06/07/2006
PATENT APPLICATION: US/10/527,100A   TIME: 17:09:53

        Input Set : **A:\P1977R1 Sequence Listing.txt**
        Output Set: **N:\CRF4\06072006\J527100A.raw**

 3 <110> APPLICANT: SARAH C. BODARY
 4   JANET K. JACKMAN
 5   BRISDELL HUNTE
 6   HILARY CLARK   Cpg-6)
 7   JILL R. SCHOENFELD
 8   P. MICKEY WILLIAMS
 9   WILLIAM I. WOOD
10   THOMAS D. WU
12 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE TREATMENT OF IMMUNE
13   RELATED DISEASES
15 <130> FILE REFERENCE: P1977R1-US
17 <140> CURRENT APPLICATION NUMBER: US 10/527,100A
C--> 18 <141> **CURRENT FILING DATE: 2006-01-09**
20 <150> PRIOR APPLICATION NUMBER: PCT/US03/028317
21 <151> PRIOR FILING DATE: 2003-09-10
23 <150> PRIOR APPLICATION NUMBER: US 60/410,340
24 <151> PRIOR FILING DATE: 2002-09-11
26 <160> NUMBER OF SEQ ID NOS: 106
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 1989
30 <212> TYPE: DNA
31 <213> ORGANISM: Homo sapiens
33 <400> SEQUENCE: 1
34 ggcacgaggg cgtcacgggc gcccggcccg ttaaaacgct gctggctgga 50
36 gccacctccc tccctgcagc ccgcaacggg aatggagtaa agggagaccc 100
38 gtcgacctgg ccacggggat cagcgatgga attaaagcaa tctttgtcca 150
40 cccatctgga agccgagaag cctctgaggc gctatggggc ggtggaggag 200
42 acggcttgga aaacggagag actggggaga aatcagctgg acatcatctc 250
44 catggcggag acaaccatga tgccagagga gattgagctg gagatggcaa 300
46 aaattcagcg tctccgggaa gtcttggtcc gccgggagtc tgagctcagg 350
48 ttcatgatgg atgacatcca gctctgcaag gacatcatgg acttgaagca 400
50 ggagctgcag aacttggtcg ccatcccaga aaaagaaaaa accaaactgc 450
52 agaagcagag agaggatgag ctaatccaga agatccacaa actggtgcag 500
54 aagagagact tcctggtgga cgatgcggag gtcgagcggt taagggagca 550
56 agaagaagac aaggaaatgg ctgatttcct gagaatcaag ttaaaacctc 600
58 tagacaaagt aaccaaatct ccagccagct cccgggcaga gaagaaagca 650
60 gagcccccac ctagcaagcc cacggtggcc aagacggggc tggcactgat 700
62 caaggattgt tgcggggcca cccagtgcaa catcatgtag cccccacgtg 750
64 gggtgccctg ggccatgggg accccccccc accctcttgt ctttatagcc 800
66 cccatttcac cggggcccaa gagctctcca aggcagaagg ggttgaaggc 850
68 aagcccgtga ctgtcaccag aggccatggg cacggcaggc gggcctggcc 900
70 accctgtaca gagtgtagca gtagggagtc tctcaccgtc gcatggtcct 950
72 ccccagagca tgccgaaccc aggagtctgt ctcactgttt atccaaacac 1000

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 74  caggaaaggt cctccctcaa aaaagcatat ctccacttct ctctagctgt 1050
 76  atctaaccca ccgtgtgaat gaactgggag aggggcatgc tccccagctg 1100
 78  tgtgtagtcg tgacttctca acaatctagc accatgtcgg acacgttccc 1150
 80  catccaccct cctagctctg ctctcagagc taggcacatg ggcacaggtc 1200
 82  ccctcccgtc tgtcctctcc cagcaactgt gccctggagg ctccacatg 1250
 84  gcccccgtgt ctctcgggca ccacccatat agcagtccca gagggcccat 1300
 86  ctgtaaagat cgagcttgtg tgtggtgtcg tggtcacatc tcccgcttcc 1350
 88  ccccatcctg tgtctgggca cagttcacat caggacagcg tccattgtgc 1400
 90  tctcagtctg cctcaggtgt gtgcctggag ggggcctgga ctggcatgga 1450
 92  tccagtgtgc agaagagcca gcagggaacc ggaagctctg atgtcaaggc 1500
 94  cagagcagtt gagaatggga cccagagtag atgctgacct gggcactcca 1550
 96  ccattccggg gccaccacag agatgccagc aggatgccac tttgccagcc 1600
 98  cgacacacgg acctttgtaa agaacagcaa caggcaggag aggcagcgtg 1650
100  tgaccagatt gtgtcccgtc attgggtggc atatgttaac tagctgccaa 1700
102  acaacttcaa cccgtgtaat tcatgtacat ttgcaacagc cagcccggta 1750
104  cagcctgtgt gacttctctg tatgtgtgtg tgtgtcgtga ccagcctaag 1800
106  tagttagcat aactcaagat gctgatgtgc agtcacccat cagagaaaat 1850
108  aaaaatggaa accacgttca cagcatttta aaagttttta cttttttct 1900
110  tgattatgga agtaatccat gtacatagta aatcatttta aaagtacaaa 1950
112  aagtatgaag aagtttgtct taaaaaaaaa aaaaaaaaa 1989
114 <210> SEQ ID NO: 2
115 <211> LENGTH: 245
116 <212> TYPE: PRT
117 <213> ORGANISM: Homo sapiens
119 <400> SEQUENCE: 2
120  His Glu Gly Val Thr Gly Ala Arg Pro Val Lys Thr Leu Leu Ala
121    1               5                  10                  15
123  Gly Ala Thr Ser Leu Pro Ala Ala Arg Asn Gly Asn Gly Val Lys
124                  20                  25                  30
126  Gly Asp Pro Ser Thr Trp Pro Arg Gly Ser Ala Met Glu Leu Lys
127                  35                  40                  45
129  Gln Ser Leu Ser Thr His Leu Glu Ala Glu Lys Pro Leu Arg Arg
130                  50                  55                  60
132  Tyr Gly Ala Val Glu Glu Thr Ala Trp Lys Thr Glu Arg Leu Gly
133                  65                  70                  75
135  Arg Asn Gln Leu Asp Ile Ile Ser Met Ala Glu Thr Thr Met Met
136                  80                  85                  90
138  Pro Glu Glu Ile Glu Leu Glu Met Ala Lys Ile Gln Arg Leu Arg
139                  95                 100                 105
141  Glu Val Leu Val Arg Arg Glu Ser Glu Leu Arg Phe Met Met Asp
142                 110                 115                 120
144  Asp Ile Gln Leu Cys Lys Asp Ile Met Asp Leu Lys Gln Glu Leu
145                 125                 130                 135
147  Gln Asn Leu Val Ala Ile Pro Glu Lys Glu Lys Thr Lys Leu Gln
148                 140                 145                 150
150  Lys Gln Arg Glu Asp Glu Leu Ile Gln Lys Ile His Lys Leu Val
151                 155                 160                 165
153  Gln Lys Arg Asp Phe Leu Val Asp Asp Ala Glu Val Glu Arg Leu
154                 170                 175                 180
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RAW SEQUENCE LISTING   DATE: 06/07/2006
PATENT APPLICATION: US/10/527,100A   TIME: 17:09:53

Input Set : A:\P1977R1 Sequence Listing.txt
Output Set: N:\CRF4\06072006\J527100A.raw

```
156  Arg Glu Gln Glu Glu Asp Lys Glu Met Ala Asp Phe Leu Arg Ile
157              185              190              195
159  Lys Leu Lys Pro Leu Asp Lys Val Thr Lys Ser Pro Ala Ser Ser
160              200              205              210
162  Arg Ala Glu Lys Lys Ala Glu Pro Pro Pro Ser Lys Pro Thr Val
163              215              220              225
165  Ala Lys Thr Gly Leu Ala Leu Ile Lys Asp Cys Cys Gly Ala Thr
166              230              235              240
168  Gln Cys Asn Ile Met
169              245
171  <210> SEQ ID NO: 3
172  <211> LENGTH: 649
173  <212> TYPE: DNA
174  <213> ORGANISM: Homo sapiens
176  <220> FEATURE:
177  <221> NAME/KEY: unsure
178  <222> LOCATION: 524
179  <223> OTHER INFORMATION: unknown base
181  <400> SEQUENCE: 3
182  cattttttaaa ctttttttttt aattttatttt tggtagctag gtttttatatt 50
184  gttcttaaat ttatttttact ctatttttatt tttccatcac ttctttgtcc 100
186  cagattcatg aaatttgctg atgtccattt tatgtctact tttgaactct 150
188  tctctttgtg tttgttttgt tcttattaca aactccaaga catttcttag 200
190  aattgtctac agatttcgtg tagctactta ttggtagctt cttaatttca 250
192  tacttgtcca gaccattaga cattattaca tgctctgtct tgggcctatc 300
194  attaacatta gcttagggat tctgatttca aagacataaa gaattggcaa 350
196  aactcttctt acagaactta aaacaagttt taaagttaca tttctataca 400
198  tctaatacat aataccttct tagccattaa tgtaattcct ctggataaag 450
200  ataatatatt caaaaaatat tgggaccaaa aaatgcactt gtttcttgct 500
202  catatatata tagatgtaaa attntttttaa tttcttgttt gtttattttg 550
204  gttacattga atacagattt gctgaacagt tttgatgtta tttttttaat 600
206  aaaatttgta ttgttaaagt gccttggaaa tttctaataa ataacttca 649
208  <210> SEQ ID NO: 4
209  <211> LENGTH: 655
210  <212> TYPE: DNA
211  <213> ORGANISM: Homo sapiens
213  <400> SEQUENCE: 4
214  aaatatgtgg gttggaagaa agaacgtgta gtagcagagt tttgggatgg 50
216  gaaaatcgtg ttggttctgc cacatgatcc aagctttgct atcaaaaagg 100
218  tagaagatgt ccaagaactt gttgataatg aattgggctt ccagcaagtt 150
220  gttcctaaat gtccaaacaa aataaaaact tttcttgtaa tatctggatg 200
222  aaaagagagt agttgggtgt ttaattgcag aacccatcaa acaggcattt 250
224  cgtgtcctgt ctgaaccaat tggtccagaa tccccaagct ctacggaatg 300
226  tcctagggct tggcaatgtt cagatgtacc agaacctgca gtctgtggga 350
228  taagtagaat ctgggttttc agactgaaga gaagaaagcg cattgcaaga 400
230  cgactggttg ataccctcag gaattgcttc atgtttggct gttttctcag 450
232  cactgatgaa atagcatttt ctgacccaac accagatggc aagttatttg 500
234  caaccaagta ctgcaacacc cctaatttcc tcgtatataa ttttaatagt 550
236  taaagctgat ttcagttata aaggagttac tatctggata agttcaaaga 600
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W--> (indicator at line 202)

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238  gctccttatt ataaaataca aactatttaa tatcaaaata aaaaataccg 650
240  agact 655
242  <210> SEQ ID NO: 5
243  <211> LENGTH: 66
244  <212> TYPE: PRT
245  <213> ORGANISM: Homo sapiens
247  <400> SEQUENCE: 5
248  Lys Tyr Val Gly Trp Lys Lys Glu Arg Val Val Ala Glu Phe Trp
249    1           5                  10                  15
251  Asp Gly Lys Ile Val Leu Val Leu Pro His Asp Pro Ser Phe Ala
252               20                  25                  30
254  Ile Lys Lys Val Glu Asp Val Gln Glu Leu Val Asp Asn Glu Leu
255               35                  40                  45
257  Gly Phe Gln Gln Val Val Pro Lys Cys Pro Asn Lys Ile Lys Thr
258               50                  55                  60
260  Phe Leu Val Ile Ser Gly
261               65
263  <210> SEQ ID NO: 6
264  <211> LENGTH: 1332
265  <212> TYPE: DNA
266  <213> ORGANISM: Homo sapiens
268  <400> SEQUENCE: 6
269  ggcacgagaa aaaacattaa gacagaactt aaaaacaata gattgactat 50
271  aatccaaaga cgagtgtacc tctaaccaca attttcattt atttttaaat 100
273  gtttccttca tggcctttct tgtggctcac cctatgcagt ttgtgtattt 150
275  gttgacaact ttatgtgttt ttaatatggt ttttgccaaa cttggttttt 200
277  ccgagaccgt cttttctcag aggctcagtt ttaccgtcct atctgcagtc 250
279  ggctactttc agtgggcaga agaggccaca tctgcttcct gtaggccctc 300
281  tgggcagaag catgcgctgg tgtctcctcc tgatctgggc caggggctg 350
283  aggcaggctc ccctcgcctc aggaatgatg acaggcacaa tagaaacaac 400
285  ggggaacatt tctgcagaga aaggtggctc tatcatctta caatgtcacc 450
287  tctcctccac cacggcacaa gtgacccagg tcaactggga gcagcaggac 500
289  cagcttctgg ccatttgtaa tgctgacttg gggtggcaca tctccccatc 550
291  cttcaaggat cgagtggccc caggtcctgg cctgggcctc accctccagt 600
293  cgctgaccgt gaacgataca ggggagtact tctgcatcta tcacacctac 650
295  cctgatggga cgtacactgg gagaatcttc ctggaggtcc tagaaagctc 700
297  agtggctgag cacggtgcca ggttccagat tccattgctt ggagccatgg 750
299  ccgcgacgct ggtggtcatc tgcacagcag tcatcgtggt ggtcgcgttg 800
301  actagaaaga agaaagccct cagaatccat tctgtggaag gtgacctcag 850
303  gagaaaatca gctggacagg aggaatggag ccccagtgct ccctcacccc 900
305  caggaagctg tgtccaggca gaagctgcac ctgctgggct ctgtggagag 950
307  cagcggggag aggactgtgc cgagctgcat gactacttca atgtcctgag 1000
309  ttacagaagc ctgggtaact gcagcttctt cacagagact ggttagcaac 1050
311  cagaggcatc ttctggaaga tacatttttg tctttgctat tatagatgaa 1100
313  tatataagca gctgtactct ccatcagtgc tgcgtgtgtg tgtgtgtgtg 1150
315  tatgtgtgtg tgtgttcagt tgagtgaata aatgtcatcc tcttctccat 1200
317  cttcatttcc ttggcctttt cgttctattc cattttgcat tatggcaggc 1250
319  ctagggtgag taacgtggat cttgatcata aatgcaaaat taaaaaatat 1300
321  cttgacctgg ttttaaaaaa aaaaaaaaaa aa 1332
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323 <210> SEQ ID NO: 7
324 <211> LENGTH: 244
325 <212> TYPE: PRT
326 <213> ORGANISM: Homo sapiens
328 <400> SEQUENCE: 7
329 Met Arg Trp Cys Leu Leu Leu Ile Trp Ala Gln Gly Leu Arg Gln
330  1               5                   10                  15
332 Ala Pro Leu Ala Ser Gly Met Met Thr Gly Thr Ile Glu Thr Thr
333                  20                  25                  30
335 Gly Asn Ile Ser Ala Glu Lys Gly Gly Ser Ile Ile Leu Gln Cys
336                  35                  40                  45
338 His Leu Ser Ser Thr Thr Ala Gln Val Thr Gln Val Asn Trp Glu
339                  50                  55                  60
341 Gln Gln Asp Gln Leu Leu Ala Ile Cys Asn Ala Asp Leu Gly Trp
342                  65                  70                  75
344 His Ile Ser Pro Ser Phe Lys Asp Arg Val Ala Pro Gly Pro Gly
345                  80                  85                  90
347 Leu Gly Leu Thr Leu Gln Ser Leu Thr Val Asn Asp Thr Gly Glu
348                  95                  100                 105
350 Tyr Phe Cys Ile Tyr His Thr Tyr Pro Asp Gly Thr Tyr Thr Gly
351                  110                 115                 120
353 Arg Ile Phe Leu Glu Val Leu Glu Ser Ser Val Ala Glu His Gly
354                  125                 130                 135
356 Ala Arg Phe Gln Ile Pro Leu Leu Gly Ala Met Ala Ala Thr Leu
357                  140                 145                 150
359 Val Val Ile Cys Thr Ala Val Ile Val Val Val Ala Leu Thr Arg
360                  155                 160                 165
362 Lys Lys Lys Ala Leu Arg Ile His Ser Val Glu Gly Asp Leu Arg
363                  170                 175                 180
365 Arg Lys Ser Ala Gly Gln Glu Glu Trp Ser Pro Ser Ala Pro Ser
366                  185                 190                 195
368 Pro Pro Gly Ser Cys Val Gln Ala Glu Ala Ala Pro Ala Gly Leu
369                  200                 205                 210
371 Cys Gly Glu Gln Arg Gly Glu Asp Cys Ala Glu Leu His Asp Tyr
372                  215                 220                 225
374 Phe Asn Val Leu Ser Tyr Arg Ser Leu Gly Asn Cys Ser Phe Phe
375                  230                 235                 240
377  Thr Glu Thr Gly
380 <210> SEQ ID NO: 8
381 <211> LENGTH: 1336
382 <212> TYPE: DNA
383 <213> ORGANISM: Homo sapiens
385 <400> SEQUENCE: 8
386 gtcagtcgcg agcgaacgac caagagggtg ttcgactgct agagccgagc 50
388 gaagcgatgc ctaaatcaaa ggaacttgtt tcttcaggct cttctggcag 100
390 tgattctgac agtgaggttg acaaaaagtt aaagaggaaa aagcaagttg 150
392 ctccagaaaa acctgtaaag aaacaaaaga caggtgagac ttcgagagcc 200
394 ctgtcatctt ctaaacagag cagcagcagc agagatgata acatgtttca 250
396 gattgggaaa atgaggtacg ttagtgttcg cgattttaaa ggcaaagtgc 300
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 06/07/2006
PATENT APPLICATION: US/10/527,100A   TIME: 17:09:54

Input Set : A:\P1977R1 Sequence Listing.txt
Output Set: N:\CRF4\06072006\J527100A.raw

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 524
Seq#:15; N Pos. 688,734,762,788
Seq#:18; N Pos. 7,11,12,26,28,567,583,586,587,588,589,591,593,594,597,599
Seq#:18; N Pos. 601,602,605,609,617,619,630,634,638,640,641,646,647,648,651
Seq#:18; N Pos. 652,656,657,658,660,665,667,668,671,672,673,678,679,683,684
Seq#:18; N Pos. 687,689,692,693,694,697,698,702,704,711,713,716,718,719,721
Seq#:18; N Pos. 723,724,725,728,730,731,736,740,742,744,746,748,749,757,758
Seq#:18; N Pos. 759,760,763,764,767,768,769,770,774,775
Seq#:46; N Pos. 779
Seq#:62; N Pos. 3011,3213
Seq#:68; N Pos. 37
Seq#:76; N Pos. 72
Seq#:93; N Pos. 1823,1824,1825,1826,1827,1828,1829,1830,1831,1832,1833,1834
Seq#:93; N Pos. 1835,1836,1837,1838,1839,1840,1841,1842,1843,1844,1845,1846
Seq#:93; N Pos. 1847,1848,1849,1850,1851,1852,1853,1854
Seq#:106; N Pos. 421

VERIFICATION SUMMARY   DATE: 06/07/2006
PATENT APPLICATION: US/10/527,100A   TIME: 17:09:54

Input Set : **A:\P1977R1 Sequence Listing.txt**
Output Set: **N:\CRF4\06072006\J527100A.raw**

```
L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:500
L:890 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:650
M:341 Repeated in SeqNo=15
L:1133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
M:341 Repeated in SeqNo=18
L:3637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:750
L:5023 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:3000
M:341 Repeated in SeqNo=62
L:5279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:0
L:5816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:50
L:7144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:1800
M:341 Repeated in SeqNo=93
L:7856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:400
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